

FORM PTO-1390  
REV. 2/01

U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371ATTORNEY'S DOCKET NUMBER  
05725.0853

customer no. 22,852

U S APPLICATION NO  
(If known, see 37 CFR 1.5)

09/763084

INTERNATIONAL APPLICATION NO.

PCT/FR00/01577

INTERNATIONAL FILING DATE

June 8, 2000

PRIORITY DATE CLAIMED

June 18, 1999

TITLE OF INVENTION

AQUEOUS SOLID GEL COMPRISING A HYDROPHILIC GELLING  
AGENT AND A PARTICULAR POLYETHYLENE GLYCOL,  
COMPOSITION COMPRISING SAME AND USES

APPLICANT(S) FOR DO/EO/US

Isabelle BARA

Applicant(s) herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed with the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154 (d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)).
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☐ Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A Substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154 (d)(4).
19. ☐ A second copy of the English language translation of the international application 35 U.S.C. 154 (d)(4).
20. ☐
21. ☒ Other items or information:
  - a. ☒ Copy of cover page of International Publication No. WO 00/78868
  - b. ☐ Copy of Notification of Missing Requirements.
  - c. ☐

U.S. APPLICATION NO. 09/763084 (If known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO. PCT/FR00/01577		ATTORNEY'S DOCKET NUMBER 05725.0853	
21. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS PTO USE ONLY	
<b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO .....\$1000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .....\$860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search fee (37 CFR 1.445(a)(2)) paid to USPTO .....\$710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) .....\$690.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33 (1)-(4) .....\$100.00  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				\$860.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492 (e)). <input type="checkbox"/> 20 <input type="checkbox"/> 30				\$	
CLAIMS	NUMBER FILED		NUMBER EXTRA	RATE	
Total Claims	28	- 20 =	8	x \$18.00	\$144.00
Independent Claims	1	- 3 =		x \$80.00	\$
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+\$270.00	\$270.00
<b>TOTAL OF THE ABOVE CALCULATIONS =</b>				\$1274.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
<b>SUBTOTAL =</b>				\$1274.00	
Processing fee of \$130.00 for furnishing the English translation later than months from the earliest priority date (37 CFR 1.492(f)). <input type="checkbox"/> 20 <input type="checkbox"/> 30				\$	
<b>TOTAL NATIONAL FEE =</b>				1274.00	
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$1274.00	
				Amount to be refunded:	\$
				charged:	\$

09/763084

- a. ☒ A check in the amount of \$ 1274.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-0916. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

**SEND ALL CORRESPONDENCE TO:**

Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
1300 I Street, N.W.  
Washington, D.C. 20005-3315

  
SIGNATURE

Ernest F. Chapman

NAME/REGISTRATION NO. 25,961

DATED: February 16, 2001

PATENT  
Attorney Docket No. 5725.0853  
Customer No. 22,852

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re National Stage of International )  
Application No.: PCT/FR00/01577 of: )  
Isabelle BARA et al. )  
Application No.: Unassigned ) Group Art Unit: Unassigned  
PCT Filed: June 8, 2000 ) Examiner: Unassigned  
National Stage Entry: February 16, 2001 )

For: SOLID AQUEOUS GEL COMPRISING A HYDROPHILIC GELLING  
AGENT AND A POLYETHYLENE GLYCOL, AND METHOD OF USING  
SAME (As Amended)

**BOX PCT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

**PRELIMINARY AMENDMENT**

Prior to examination of the above-identified application, please amend this  
application as follows:

**IN THE TITLE:**

Please replace the existing title with the following -- SOLID AQUEOUS GEL  
COMPRISING A HYDROPHILIC GELLING AGENT AND POLYETHYLENE  
GLYCOL, AND METHOD OF USING SAME -

**IN THE CLAIMS:**

Please cancel claims 2-25 without prejudice or disclaimer and replace them with new claims 26-88 as follows:

--26. A gel according to claim 1, wherein the at least one hydrophilic gelling agent is chosen from polysaccharides, protein derivatives, synthetic and semisynthetic gels of polyesters, polyacrylates, polymethacrylates and derivatives thereof.

27. A gel according to claim 26, wherein the synthetic and semisynthetic gels of polyesters are sulfonic synthetic and semisynthetic gels of polyesters.

28. A gel according to claim 26, wherein the at least one hydrophilic gelling agent is a polysaccharide chosen from:

- algal extracts,
- exudates of microorganisms,
- fruit extracts,
- gelling agents of animal origin,
- polysaccharides possessing a side chain and 6 neutral sugars,
- and
- mixtures thereof.

29. A gel according to claim 28, wherein the algal extracts are chosen from agar, carrageenans, and alginates.

30. A gel according to claim 29, wherein the alginates are chosen from alginates of sodium and calcium.

31. A gel according to claim 28, wherein the exudates of microorganisms are chosen from xanthan gum and its derivatives and gellan gum.

32. A gel according to claim 28, wherein the fruit extracts are chosen from pectins.

33. A gel according to claim 28, wherein the gelling agents of animal origin are chosen from protein derivatives.

34. A gel according to claim 33, wherein the protein derivative gelling agents are chosen from caseinates and gelatin from cattle and fish.

35. A gel according to claim 28, wherein the at least one hydrophilic gelling agent is chosen from gellan, carragheenans, and mixtures thereof.

36. A gel according to claim 1, wherein the at least one hydrophilic gelling agent is present in an amount ranging from 0.1% to 30% by weight, relative to the total weight of the gel.

37. A gel according to claim 36, wherein the at least one hydrophilic gelling agent is present in an amount ranging from 0.2% to 10% by weight, relative to the total weight of the gel.

38. A gel according to claim 1, wherein the at least one polyethylene glycol has a number of moles of oxyethylene of 12.

39. A gel according to claim 1, wherein the at least one polyethylene glycol is present in an amount ranging from 1% to 20% by weight, relative to the total weight of the gel.

40. A gel according to claim 39, wherein the at least one polyethylene glycol is present in an amount ranging from 2% to 10% by weight, relative to the total weight of the gel.

41. A gel according to claim 1, further comprising a pulverulent phase comprising at least one component chosen from pigments, nacreous substances, and fillers.

42. A gel according to claim 41, wherein the pigments are chosen from titanium, zirconium and cerium dioxides; zinc, iron and chromium oxides; nanotitaniums; ferric blue; carbon black; calcium, barium, aluminum and zirconium salts; acid dyes; azo dyes; anthraquinonoid dyes; pigments coated with silicone compounds; pigments coated with polymers; pigments coated with fluorinated compounds; and mixtures thereof.

43. A gel according to claim 42, wherein the acid dyes are chosen from halo-acid dyes.

44. A gel according to claim 42, wherein the pigments coated with silicone compounds are chosen from polydimethylsiloxanes.

45. A gel according to claim 42, wherein the pigments coated with polymers are chosen from polyethylenes.

46. A gel according to claim 41, wherein the pigments are present in an amount ranging up to 40% by weight, relative to the total weight of the gel.

47. A gel according to claim 46, wherein the pigments are present in an amount ranging from 0.1% to 30% by weight, relative to the total

weight of the gel.

48. A gel according to claim 47, wherein the pigments are present in an amount ranging from 1% to 20% by weight, relative to the total weight of the gel.

49. A gel according to claim 41, wherein the nacreous substances are chosen from natural nacre, mica covered with titanium oxide, mica covered with iron oxide, natural pigment, bismuth oxychloride, and colored titanium mica.

50. A gel according to claim 41, wherein the nacreous substances are present in an amount ranging up to 40% by weight, relative to the total weight of the gel.

51. A gel according to claim 50, wherein the nacreous substances are present in an amount ranging from 0.1% to 30% by weight, relative to the total weight of the gel.

52. A gel according to claim 51, wherein the nacreous substances are present in an amount ranging from 1% to 20% by weight, relative to the total weight of the gel.

53. A gel according to claim 41, wherein the fillers are chosen from talc, mica, silica, kaolin, powders of Nylon, poly- $\beta$ -alanine and polyethylene, Teflon, lauroyllysine, starch, boron nitride, bismuth oxychloride, tetrafluoroethylene polymer powders, polymethyl methacrylate powders, polyurethane powders, polystyrene powders, polyester powders, synthetic hollow microspheres, microsponges, silicone resin microbeads, oxides of zinc and of



titanium, oxides of zirconium and of cerium, precipitated calcium carbonate, magnesium carbonate, basic magnesium carbonate, hydroxyapatite, hollow silica microspheres, glass and ceramic microcapsules, metal soaps derived from organic carboxylic acids comprising from 8 to 22 carbon atoms, the compounds  $\text{SiO}_2/\text{TiO}_2/\text{SiO}_2$ ,  $\text{TiO}_2/\text{CeO}_2/\text{SiO}_2$ , and  $\text{TiO}_2/\text{ZnO}/\text{talc}$ , and polyethylene terephthalate/polymethacrylate polymers in the form of flakes.

54. A gel according to claim 53, wherein the metallic soaps derived from organic carboxylic acids comprise from 12 to 18 carbon atoms.

55. A gel according to claim 53, wherein the metallic soaps derived from organic carboxylic acids are chosen from zinc stearate, magnesium stearate, lithium stearate, zinc laurate and magnesium myristate.

56. A gel according to claim 41, wherein the fillers are present in an amount ranging up to 60% by weight, relative to the total weight of the gel.

57. A gel according to claim 56, wherein the fillers are present in an amount ranging from 0.1% to 40% by weight, relative to the total weight of the gel.

58. A gel according to claim 57, wherein the fillers are present in an amount ranging from 1% to 20% by weight, relative to the total weight of the gel.

59. A gel according to claim 1, further comprising at least one salt.

60. A gel according to claim 59, wherein the at least one salt is chosen from calcium, magnesium and strontium nitrate; calcium and magnesium

borate; calcium, sodium, magnesium, strontium, neodymium and manganese chloride; magnesium and calcium sulfate; and calcium and magnesium acetate.

61. A gel according to claim 60, wherein the at least one salt is magnesium chloride.

62. A gel according to claim 59, wherein the at least one salt is present in an amount ranging from 0.01% to 2% by weight, relative to the total weight of the gel.

63. A gel according to claim 62, wherein the at least one salt is present in an amount ranging from 0.1% to 1% by weight, relative to the total weight of the gel.

64. A gel according to claim 1, further comprising a cosmetically or physiologically acceptable medium.

65. A gel according to claim 1, further comprising at least one water chosen from floral water, mineral water, and thermal water.

66. A gel according to claim 65, wherein the floral water is cornflower water.

67. A gel according to claim 65, wherein the at least one water is present in an amount ranging up to 98.9% by weight, relative to the total weight of the gel.

68. A gel according to claim 67, wherein the at least one water is present in an amount ranging from 20% to 95% by weight, relative to the total weight of the gel.

69. A gel according to claim 1, further comprising at least one

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water-soluble dye.

70. A gel according to claim 69, wherein the at least one water-soluble dye is chosen from Ponceau disodium salt, alizarin green disodium salt, quinoline yellow, amaranth trisodium salt, tartrazine disodium salt, rhodamine monosodium salt, fuchsin disodium salt and xanthophyll.

71. A gel according to claim 1, further comprising at least one solvent chosen from ethanol, isopropanol, propylene glycol, butylene glycol, dipropylene glycol, diethylene glycol, and glycol ethers.

72. A gel according to claim 71, wherein the glycol ethers are chosen from (C<sub>1</sub>-C<sub>4</sub>) alkyl ethers of mono-, di-, and tripropylene glycol, and mono-, di-, and triethylene glycol.

73. A gel according to claim 1, further comprising a fatty phase.

74. A gel according to claim 73, wherein the fatty phase comprises at least one oil.

75. A gel according to claim 74, wherein the at least one oil is chosen from liquid paraffin, vaseline, perhydrosqualene, apricot oil, wheatgerm oil, sweet almond oil, calophyllum oil, sesame oil, macadamia oil, grapeseed oil, colza oil, coprah oil, groundnut oil, palm oil, castor oil, avocado oil, jojoba oil, olive oil and cereal germ oil; esters of fatty acids and polyol; alcohols; acetylglycerides; octanoates, decanoates and ricinoleates of alcohols and polyalcohols; triglycerides of fatty acids; glycerides; fluorinated oils and perfluorinated oils; synthetic oils; silicone oils; polymethylsiloxanes; polymethylphenylsiloxanes; polysiloxanes modified with fatty acids, fatty alcohols

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or polyoxyalkylenes; fluorinated silicones and perfluorinated oils.

76. A gel according to claim 73, wherein the fatty phase comprises at least one fatty substance chosen from silicone gums; microcrystalline waxes; paraffin; petrolatum; vaseline; ozokerite; montan wax; beeswax; lanolin and its derivatives; candelilla wax; ouricury wax; carnauba wax; Japan wax; cocoa butter; cork fiber wax; sugarcane wax; hydrogenated oils which are solid at 25°C; ozokerites; fatty esters and glycerides which are solid at 25°C; polyethylene waxes; the waxes obtained by Fischer-Tropsch synthesis; hydrogenated oils which are solid at 25°C; silicone waxes; and fluorinated waxes.

77. A gel according to claim 73, wherein the fatty phase is present in an amount ranging up to 30% by weight, relative to the total weight of the composition.

78. A gel according to claim 77, wherein the fatty phase is present in an amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

79. A gel according to claim 78, wherein the fatty phase is present in an amount ranging from 0.5% to 10% by weight, relative to the total weight of the composition.

80. A gel according to claim 73, further comprising at least one surfactant.

81. A gel according to claim 80, wherein the at least one surfactant is chosen from nonionic oil-in-water surfactants and cosurfactants,

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with a hydrophilic/lipophilic balance of at least 8.

82. A gel according to claim 80, wherein the at least one surfactant is present in an amount ranging from 0.05% to 8% by weight, relative to the total weight of the composition.

83. A gel according to claim 1, further comprising at least one compound chosen from antioxidants, essential oils, preservatives, active lipophilic and hydrophilic pharmaceutical and cosmetic substances, moisturizers, vitamins, essential fatty acids, sphingolipids, self-tanning compounds, sunscreens, and fragrances.

84. A solid composition with a continuous aqueous phase, comprising a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

85. A makeup product for the skin or keratinous fibers, comprising a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

86. A body makeup product, a foundation, an eyeshadow, a blusher, a concealer, a lipstick, a lipliner pencil, a mascara, an eyeliner pencil, or a stick for coloring or making up locks of hair comprising a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

87. A method of making up the skin and/or keratinous fibers, comprising applying to the skin and/or keratinous fibers, a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

88. A method of making up the skin and/or keratinous fibers, comprising applying to the skin and/or keratinous fibers, a makeup product for the skin or keratinous fibers, comprising a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.--

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Remarks


Claims 1 and 26-88 are now pending. Originally filed claims 2-25 have been cancelled without prejudice or disclaimer and replaced by new claims 26-88. New claims 26-88 have been added to more particularly point out and distinctly claim that which Applicants consider to be their invention. Support for new claims 26-88 can be found throughout the specification and claims of the international application as originally filed. Accordingly, no new matter has been added.

If the Examiner believes a telephone conference would be helpful in advancing the prosecution of this application, the Examiner is respectfully urged to contact Applicants' undersigned representative at (202) 408-4193.

Please grant any extensions of time required to enter this Preliminary Amendment and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON,  
FARABOW,  
GARRETT & DUNNER, L.L.P.

By:   
Michele C. Bosch  
Reg. No. 40,524

Date: March 2, 2001

**SOLID AQUEOUS GEL COMPRISING A HYDROPHILIC GELLING  
AGENT AND A SPECIFIC POLYETHYLENE GLYCOL, COMPOSITION  
COMPRISING THIS GEL AND USES**

The present invention relates to a solid  
5 aqueous gel, to a solid composition with a continuous  
aqueous phase comprising such a gel, and to the use  
thereof in the cosmetic field, especially for making up  
the skin and/or mucosae and/or keratinous fibers.

Products presented in solid form are known  
10 within the cosmetics industry. Products of this type  
that may be mentioned include, for example, in the  
makeup field, lipstick, foundation or eyeshadow sticks;  
in the skincare or lipcare field, lip repair pencils  
and depigmenting, makeup removing or moisturizing  
15 sticks; and, in the hygiene field, deodorant sticks and  
foaming sticks or bars for shaving or for washing the  
skin.

It is in effect particularly useful to have  
available products in stick form, insofar as such  
20 products are very convenient to use and are readily  
portable, with no risk of the product running.

Moreover, makeup products are formulated,  
very generally, on the basis first of a fatty phase,  
for reasons of comfort and softness, and secondly of a  
25 pulverulent phase, which provides the desired color.  
This pulverulent phase may comprise pigments and/or  
fillers and/or nacreous substances. The fatty phase



generally comprises waxes and/or oils and/or pastelike compounds.

However, sticks formulated on a wax basis have certain disadvantages; they have a greasy  
5 character, which is not appreciated by users, and they lack freshness on application. Moreover, it is difficult to introduce active hydrophilic substances into them.

To an increasing extent, therefore, attempts  
10 are being made to produce makeup sticks comprising an aqueous phase in as high a concentration as possible. However, the sticks comprising a notable aqueous phase are sometimes subject to problems of stability and of lack of cohesion. In particular, these gels, which are  
15 produced starting from the combination of a hydrophilic gelling agent and water, have the disadvantage of being fragile and are very liable to break during use.

One means of improving the solidity of the gels is to increase the concentration of hydrophilic  
20 gelling agent, but in that case the gels develop cleaving difficulties, i.e., the amount of material removed when the product is taken is inadequate.

However, a prerequisite for a makeup product in particular is that the product can be dispensed  
25 optimally, i.e., that it is possible simply, with the aid of the finger or of a sponge or even directly on the skin of the body, for example, not only to take the

appropriate amount of product (not too much, so as not to waste the product, but sufficient to provide a makeup effect) but also to preserve the integrity of the product at the time at which it is dispensed: what  
5 is needed is not to break the product as a result of a shearing phenomenon but instead to dispense the entirety of the product, together with the pigments and/or nacreous substances, and/or the fillers if present, which provide the makeup function. Only if  
10 this condition is met is it possible to apply the product homogeneously and to obtain a uniform application of makeup.

Cleavable products also exist, but are then too soft and end up by shearing in the course of  
15 repeated applications, or else exhibit phenomena of syneresis over the course of time, i.e., the liquid part ends up by exuding and the product presents two phases: an uncleavable solid phase and a liquid phase. The product is no longer able to fulfill its function,  
20 namely that of making up, since it is impossible to dispense the pigments on the finger or on a sponge.

Therefore, there is a need for a solid aqueous gel which can be utilized by direct application to the skin or using a sponge, which cleaves well while  
25 remaining sufficiently solid, and which does not break during use.

The applicant has unexpectedly discovered that, by combining a hydrophilic gelling agent with a specific polyethylene glycol, namely a polyethylene glycol in which the number of moles of oxyethylene  
5 ranges from 12 to 180, it is possible to produce solid, homogeneous and stable aqueous gels which exhibit excellent cohesion and cleave easily under the finger or under the sponge, or else directly on the skin of the face or body.

10 In effect, the applicant has found that the combination of a polyethylene glycol in which the number of moles of oxyethylene is less than 12 with a hydrophilic gelling agent greatly decreases the hardness, which also makes cleavage virtually  
15 impossible: the gel becomes too soft and the product can no longer be used as a stick or in a dish. Likewise, unexplainedly, the combination of a polyethylene glycol in which the number of moles of oxyethylene is greater than 180 with a hydrophilic  
20 gelling agent also entails the softening of the gel, which, moreover, becomes sticky and is therefore not suitable for a cosmetic use. Only the combination claimed below, with a specific polyethylene glycol, makes it possible to obtain a solid composition which  
25 has ideal properties both of cohesion and of cleaving.

The present invention therefore provides a solid aqueous gel comprising i) at least one

hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

The gels of the invention exhibit excellent  
5 cleaving and application qualities. In particular, by virtue of the combination according to the invention, a level of cleaving is obtained which is greater than that of the known sticks, at equivalent hardness. The product is easy to apply, and may be applied directly  
10 to the body or with the finger or else by sponge, dispensing a sufficient quantity of product, which is easy to apply subsequently to the skin in a homogeneous manner without requiring wetting beforehand. The makeup obtained is uniform and homogeneous.

15 Moreover, these gels exhibit excellent cohesion. These gels are stable over time and with respect to temperature. Thus, after being kept at ambient temperature or at 45°C for two months, they exhibit no phenomenon of syneresis (exudation) or else  
20 of phase separation; their appearance and their hardness are unchanged.

The gels according to the invention do not exude, even at low gelling agent contents, and they do not mandatorily necessitate the use of a particular  
25 preparation technique. On application, they produce a sensation of great freshness while retaining good cosmetic properties, especially softness.

The present invention additionally provides a solid composition with a continuous aqueous phase comprising a gel as defined above.

The present invention further provides a  
5 makeup product for the skin or keratinous fibers,  
comprising a gel and/or a composition as defined above.

The present invention additionally provides a method of making up the skin and/or mucosae and/or keratinous fibers, which consists in applying to the  
10 latter a solid aqueous gel and/or a solid composition  
and/or a makeup product as defined above.

In the context of the present invention, solid composition or gel means a gel or composition having a hardness defined by a maximum force before  
15 breakage which ranges from 5 to 50 grams at ambient  
temperature (20-25°C) following penetration by a  
stainless steel moving body 2 mm in diameter into the  
matrix of the gel or composition at a thickness of 1 mm  
at a rate of 1 mm/s and withdrawal of said moving body  
20 from the matrix of the gel or composition at a rate of  
2 mm/s, the maximum force before breakage being  
measured with a texture analyzer of the type "TAXT2"  
sold by the company RHEO.

More preferably, the maximum force before  
25 breakage ranges from 7 to 40 g.

The gel according to the invention comprises a hydrophilic gelling agent. By gelling agent is meant

a compound which, in the presence of a solvent, creates more or less strong intermacromolecular bonds, thereby giving rise to a three-dimensional network which entraps said solvent.

5                This hydrophilic gelling agent may be selected from polysaccharides, protein derivatives, synthetic or semisynthetic gels of polyester type, especially sulfonic type, polyacrylates or polymethacrylates and derivatives thereof.

10              Among the polysaccharides, mention may be made of:

- algal extracts such as agar, carragheenans (iota, kappa, lambda), alginates, especially those of Na or Ca;
- 15 - exudates of microorganisms, such as xanthan gum and its derivatives, such as the product sold under the trade name "Rheosan" by the company Rhodia Chimie, gellan,
- fruit extracts such as pectins;
- 20 - gelling agents of animal origin such as protein derivatives, especially gelatin, from cattle or fish, and caseinates;
- polysaccharides possessing a side chain and 6 neutral sugars, as described in the document FR-A-2759377,
- 25 - and mixtures thereof.

The synthetic or semisynthetic gels which may be mentioned include the copolyesters described in the application FR-A-2 760 643.

Preferably, the hydrophilic gelling agent is  
5 selected from the polysaccharides, and, more preferably, the hydrophilic gelling agent is gellan.

As products which are particularly suitable for the invention, mention may be made of the gellan gum sold under the trade name "Kelcogel F" by the  
10 company NUTRASWEET-KELCO or else the iota-carragheenans sold under the trade names "Seaspen PF 357" or "Viscarin SD 389" by the company FMC.

The hydrophilic gelling agent is present in the gel according to the invention at a concentration  
15 which makes it possible to obtain, in combination with specific polyethylene glycol, the hardness which is suitable for ideal cleaving. The hydrophilic gelling agent is preferably present in the gel according to the invention at a concentration which may range from 0.1  
20 to 30%, more preferably from 0.2 to 10%, by weight, relative to the total weight of the gel.

The gel according to the invention also comprises a polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.  
25 Polyethylene glycols are known compounds of the following formula:  $\text{H}(\text{OCH}_2\text{CH}_2)_n\text{OH}$ , in which  $n$  represents the number of moles of oxyethylene. Compounds which can

be used in the present invention are, for example, the products listed in the CTFA under the names "PEG-12", "PEG-32", "PEG-75", "PEG-180". Mention may be made of the polyethylene glycol containing 12 EO sold under the trade name "Polyéthylène 600" by the company Lambert Rivièrè, and the polyethylene glycol containing 180 EO sold under the trade name "Polyéthylène 6000" by the company Kao Soap.

Preferably, the polyethylene glycol which is used in the present invention has a number of moles of oxyethylene of 12.

The polyethylene glycol according to the invention is present in the gel according to the invention at a concentration which makes it possible to obtain, in combination with the hydrophilic gelling agent, the hardness and consistency which are suitable for ideal cleaving. Preferably, the polyethylene glycol according to the invention is present in the gel according to the invention at a concentration which may range from 1 to 20% by weight, more preferably from 2 to 10% by weight, relative to the total weight of the gel.

The gels of the invention further comprise a cosmetically or physiologically acceptable medium, i.e., a medium which is compatible with all of the keratinous matter such as the skin, nails, hair,



eyelashes and eyebrows, mucosae and semimucosae, and any other cutaneous zone of the body and of the face.

The gels according to the invention may further comprise a floral water such as cornflower  
5 water and/or a mineral water such as VITTEL water, LUCAS water or LA ROCHE POSAY water and/or a thermal water.

The gels according to the invention may also comprise water-soluble dyes selected from the dyes  
10 common in the field under consideration, such as Ponceau disodium salt, alizarin green disodium salt, quinoline yellow, amaranth trisodium salt, tartrazine disodium salt, rhodamine monosodium salt, fuchsin disodium salt and xanthophyll.

15 Preferably, the gels according to the invention comprise up to 98.9% by weight, preferably from 20 to 95% by weight, relative to the total weight of the gel, of water.

The gels according to the invention may  
20 further comprise solvents other than water such as, for example, primary alcohols such as ethanol and isopropanol, glycols such as propylene glycol, butylene glycol, dipropylene glycol and diethylene glycol, glycol ethers such as the C<sub>1</sub>-C<sub>4</sub> alkyl ethers of mono-,  
25 di- or tripropylene glycol, mono-, di- or triethylene glycol, and mixtures thereof.

The rigidity of the gels according to the invention may be modified by admixing them with one or more salts which will increase this rigidity. These salts may be selected from mono-, di- or trivalent metal salts, and more particularly alkali metal and alkaline earth metal salts, and especially sodium, calcium or magnesium salts. The ions which make up these salts may be selected, for example, from carbonates, bicarbonates, sulfates, glycerophosphates, borates, chlorides, nitrates, acetates, hydroxides, persulfates and the salts of  $\alpha$ -hydroxy acids (citrates, tartrates, lactates, malates) or fruit acids, or else the salts of amino acids (aspartate, arginate, glycocholate, fumarate). The amount of salt may range from 0.01 to 2% and preferably from 0.1 to 1% of the total weight of the gel.

Preferably, the salt is selected from calcium, magnesium or strontium nitrate, calcium or magnesium borate, calcium, sodium, magnesium, strontium, neodymium or manganese chloride, magnesium or calcium sulfate, calcium or magnesium acetate, and mixtures thereof. More preferably, the salt is magnesium chloride.

The gel according to the invention may also comprise a pulverulent phase which may comprise a pigment and/or a nacreous substance and/or a filler.

The term pigments should be understood as meaning white or colored, mineral or organic particles which are insoluble in the medium and which are intended for coloring and/or opacifying the  
5 composition.

The pigments may be present in a proportion of 0-40% by weight relative to the total weight of the gel, preferably in a proportion of from 0.1 to 30% and more preferably in a proportion of 1-20%. They may be  
10 white or colored, mineral and/or organic, of customary size or nanometric. Nanometric size refers to pigments whose average particle size ranges from 5 to 100 nm.

Among mineral pigments and nanopigments, mention may be made of titanium, zirconium or cerium  
15 dioxides, and also zinc, iron or chromium oxides, nanotitaniums, and ferric blue. Among organic pigments, mention may be made of carbon black, and the lakes which are commonly employed to impart a makeup effect to the lips and to the skin, which are calcium, barium,  
20 aluminum or zirconium salts of acid dyes such as halo-acid dyes, azo dyes or anthraquinonoid dyes.

The pigments may in particular be coated with silicone compounds such as PDMSs and/or with polymers, especially polyethylenes, or else with fluorinated  
25 compounds. Mention may thus be made of the Maprecos SA pigments or the Myoshi PI pigments.

The term nacreous substances is intended to embrace iridescent particles which reflect light.

The nacreous substances may be present in the gel in a proportion of 0-40% by weight, preferably in a  
5 proportion of from 0.1 to 30% and more preferably in a proportion of 1-20% by weight.

Among the nacreous substances which may be considered, mention may be made of natural nacre, mica covered with titanium oxide, iron oxide, natural  
10 pigment or bismuth oxychloride, and colored titanium mica.

By fillers are meant colorless or white, mineral or synthetic, lamellar or nonlamellar particles which are intended to give the composition body or  
15 rigidity and/or the makeup softness, matteness and uniformity.

The fillers, which may be present in the gel in a proportion of 0-60% by weight relative to the total weight of the gel, preferably in a proportion of  
20 from 0.1 to 40%, more preferably 1-20%, may be mineral or synthetic, lamellar or nonlamellar.

Mention may be made of talc, mica, silica, kaolin, powders of Nylon, poly- $\beta$ -alanine and polyethylene, Teflon, lauroyl-lysine, starch, boron  
25 nitride, bismuth oxychloride, tetrafluoroethylene polymer powders, polymethyl methacrylate powders, polyurethane powders, polystyrene powders, polyester

powders, synthetic hollow microspheres, microsponges, silicone resin microbeads, oxides of zinc and of titanium, oxides of zirconium or of cerium, precipitated calcium carbonate, magnesium carbonate and  
5 basic magnesium carbonate, hydroxyapatite, hollow silica microspheres, glass or ceramic microcapsules, metal soaps derived from organic carboxylic acids having 8 to 22 carbon atoms, preferably 12 to 18 carbon atoms, such as zinc stearate, magnesium stearate or  
10 lithium stearate, zinc laurate and magnesium myristate, the compounds  $\text{SiO}_2/\text{TiO}_2/\text{SiO}_2$ ,  $\text{TiO}_2/\text{CeO}_2/\text{SiO}_2$ , or else  $\text{TiO}_2/\text{ZnO}/\text{talc}$ , and polyethylene terephthalate/polymethacrylate polymers in the form of flakes.

15           Generally, the pulverulent phase comprises a sufficient amount of pigments and/or nacreous substances and/or fillers to provide the desired makeup effect. Preferably, therefore, the aqueous gel according to the invention is not transparent, i.e.,  
20 the characters of a newspaper page cannot be seen through the gel. More preferably, it is not translucent, i.e., it does not allow the passage of light.

          The gels of the invention may be incorporated  
25 in cosmetic compositions, making up the continuous phase thereof. Such compositions may also comprise a fatty phase which may, for example, comprise an oil.

Among the oils which may be used, mention may be made of oils of animal, vegetable or mineral origin, such as liquid paraffin, vaseline, perhydrosqualene, apricot oil, wheatgerm oil, sweet almond oil,

5 calophyllum oil, sesame oil, macadamia oil, grapeseed oil, colza oil, coprah oil, groundnut oil, palm oil, castor oil, avocado oil, jojoba oil, olive oil or cereal germ oil; esters of fatty acids and polyol, especially liquid triglycerides; alcohols;

10 acetylglycerides; octanoates, decanoates or ricinoleates of alcohols or polyalcohols; triglycerides of fatty acids; glycerides, fluorinated oils and perfluorinated oils; synthetic oils such as fatty esters; silicone oils such as volatile silicone oils,

15 polymethylsiloxanes, polymethylphenylsiloxanes, polysiloxanes modified with fatty acids, fatty alcohols or polyoxyalkylenes, fluorinated silicones and perfluorinated oils.

The fatty phase of the compositions according

20 to the invention may further comprise other fatty substances, which may be selected by the skilled worker on the basis of his or her general knowledge such as to confer on the final composition the desired properties, in terms for example of consistency, texture and/or

25 transfer. These additional fatty substances may be waxes, gums and/or pastelike fatty substances of animal

origin, vegetable origin, mineral origin or synthetic origin, and mixtures thereof.

Mention may be made in particular of:

- silicone gums,
- 5 - waxes of animal, vegetable, mineral or synthetic origin such as microcrystalline waxes, paraffin, petrolatum, vaseline, ozokerite, montan wax; beeswax, lanolin and its derivatives; candelilla wax, ouricury wax, carnauba wax, Japan wax, cocoa butter, cork fiber
- 10 wax or sugarcane wax; hydrogenated oils which are solid at 25°C, ozokerites, fatty esters and glycerides which are solid at 25°C; polyethylene waxes and the waxes obtained by Fischer-Tropsch synthesis; hydrogenated oils which are solid at 25°C; lanolins; fatty esters
- 15 which are solid at 25°C; silicone waxes; fluorinated waxes; mixtures thereof.

The fatty phase may be present in proportions ranging, for example, up to 30%, preferably from 0.1 to 20% and, better still, from 0.5 to 10% of the total

20 weight of the composition, these proportions varying depending on the selected application.

The oils or waxes may be introduced into the aqueous phase in the presence of one or more surfactants, in order to ensure a better dispersion.

25 The compositions according to the invention may therefore also comprise one or more ionic or nonionic O/W surfactants or cosurfactants, with a HLB

(hydrophilic/lipophilic balance) greater than or equal to 8, which are commonly used in the cosmetic field. When it is present, the amount of surfactant or cosurfactant ranges preferably from 0.05 to 8% of the total weight of the composition.

The composition may further comprise any additional compound which is commonly used in the cosmetic field. These additional compounds may be selected from antioxidants, essential oils, preservatives, active lipophilic or hydrophilic pharmaceutical or cosmetic substances, moisturizers, vitamins, essential fatty acids, sphingolipids, self-tanning compounds such as DHA, sunscreens, fragrances, and mixtures thereof.

The person skilled in the art will of course take care to select said optional additional compound(s), and/or the amount thereof, such that the advantageous properties of the gel and/or of the composition according to the invention are not, or not substantially, adversely affected by the intended addition.

The gels and the compositions having a continuous aqueous phase, according to the invention, may be prepared in accordance with the conventional methods of preparing sticks, these methods being well known to the person skilled in the art.



The gels and the compositions according to the invention may constitute products for making up or caring for the skin, in particular of the body, of the face and/or of the scalp, or of keratinous fibers, especially the hair, nails, eyebrows and/or eyelashes, or else the mucosae, in particular the lips. They may therefore consist of body makeup products, foundations, eyeshadows, blushers, concealers, lipsticks, lipliner pencils, mascaras, eyeliner pencils, and sticks for coloring or making up locks of hair.

The invention is illustrated in more detail in the examples below.

In the examples below, the amounts are given in percent by weight relative to the total weight of the composition.

#### **EXAMPLE 1:**

The applicant has produced the aqueous gel in the form of the following stick foundation:

- Gellan gum sold under the trade name "Kelcogel F" by NUTRASWEET-KELCO	0.5%
- Mg chloride	0.1%
- PEG-12	5%
- Preservative	qs
- Pigments (iron oxides and titanium dioxide)	14%
- Propylene glycol	7%
- Water	qs 100%

This gel was prepared as follows: the water and the preservative were heated to 90°C, and then the gellan was incorporated with stirring. After waiting for 15 minutes, the  $\text{MgCl}_2$  and PEG-12 were incorporated with stirring, followed by the pigment paste, produced beforehand by mixing the pigments with the propylene glycol.

The mixture was subsequently poured into a dish and then cooled. The whole system is left to rest at room temperature for 24 h.

The result is a stick which is very fresh on application, which is conveniently solid, is easy to pick up, and can be applied easily and homogeneously to the skin.

Making up the skin with such a stick gives a natural and transparent result, totally devoid of any greasy effect.

The hardness of this gel, measured as described above, is 19 g.

This stick cleaves very well.

**EXAMPLE 2:** Comparative

The applicant produced the same stick as in Example 1 but replacing the 5% of PEG-12 with 5% of PEG-8.

The stick obtained has a hardness, measured as described above, of 13.1 g.

This stick is too rubbery in texture to permit satisfactory cleaving.

**EXAMPLE 3:**

5               The applicant produced the same stick as in Example 1 but replacing the 5% of PEG-12 with 5% of PEG-180.

The stick obtained has a hardness, measured as described above, of 20.7 g;

10              It is easy to cleave. It permits homogeneous and uniform makeup directly on the skin, with the finger or with a sponge.

**EXAMPLE 4:** Comparative

15              The applicant produced the same stick as in Example 1 but replacing the 5% of PEG-12 with 5% of PEG-115M, in which the number of moles of oxyethylene is 115 000.

20              The stick obtained is extremely soft; its hardness cannot be measured. This product is very sticky and is difficult to apply to the skin.

**CLAIMS**

1. A solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180.

2. The gel as claimed in claim 1, characterized in that the hydrophilic gelling agent is selected from polysaccharides, protein derivatives, synthetic or semisynthetic gels of polyester type, especially sulfonic type, polyacrylates or polymethacrylates and derivatives thereof.

3. The gel as claimed in claim 2, characterized in that the hydrophilic gelling agent is a polysaccharide selected from:

- algal extracts such as agar, carragheenans, alginates, especially those of Na or Ca;
- exudates of microorganisms, such as xanthan gum and its derivatives or else gellan gum,
- fruit extracts such as pectins;
- gelling agents of animal origin such as protein derivatives, especially gelatin, from cattle or fish, and caseinates;
- polysaccharides possessing a side chain and 6 neutral sugars,
- and mixtures thereof.

4. The gel as claimed in claim 3, characterized in that the hydrophilic gelling agent is

selected from gellan, carragheenanans and mixtures thereof.

5. The gel as claimed in any of the preceding claims, characterized in that the hydrophilic gelling agent is present at a concentration ranging from 0.1 to 30%, preferably from 0.2 to 10%, by weight, relative to the total weight of the gel.

6. The gel as claimed in any of the preceding claims, characterized in that the polyethylene glycol has a number of moles of oxyethylene of 12.

7. The gel as claimed in any of the preceding claims, characterized at that the polyethylene glycol is present at a concentration ranging from 1 to 20% by weight, more preferably from 2 to 10% by weight, relative to the total weight of the gel.

8. The gel as claimed in any of the preceding claims, characterized in that it additionally comprises a pulverulent phase comprising a pigment and/or a nacreous substance and/or a filler.

9. The gel as claimed in claim 8, characterized in that the pigments are selected from titanium, zirconium or cerium dioxides, zinc, iron or chromium oxides, nanotitaniums, ferric blue, carbon black, calcium, barium, aluminum or zirconium salts, acid dyes such as halo-acid dyes, azo dyes or

anthraquinonoid dyes, pigments coated with silicone compounds such as polydimethylsiloxanes and/or with polymers, especially polyethylenes, or else with fluorinated compounds, and/or mixtures thereof.

5           10. The gel as claimed in either of claims 8 and 9, characterized in that the pigments are present in an amount ranging up to 40% by weight, preferably from 0.1 to 30% by weight, relative to the total weight of the gel.

10           11. The gel as claimed in any of claims 8 to 10, characterized in that the nacreous substances are selected from natural nacre, mica covered with titanium oxide, iron oxide, natural pigment or bismuth oxychloride, and colored titanium mica.

15           12. The gel as claimed in any of claims 8 to 11, characterized in that the nacreous substances are present in an amount ranging up to 40% by weight, preferably from 0.1 to 30% by weight, relative to the total weight of the gel.

20           13. The gel as claimed in any of claims 8 to 12, characterized in that the fillers are selected from talc, mica, silica, kaolin, powders of Nylon, poly- $\beta$ -alanine and polyethylene, Teflon, lauroyllysine, starch, boron nitride, bismuth oxychloride,  
25 tetrafluoroethylene polymer powders, polymethyl methacrylate powders, polyurethane powders, polystyrene powders, polyester powders, synthetic hollow

microspheres, microsponges, silicone resin microbeads, oxides of zinc and of titanium, oxides of zirconium or of cerium, precipitated calcium carbonate, magnesium carbonate and basic magnesium carbonate,

- 5 hydroxyapatite, hollow silica microspheres, glass or ceramic microcapsules, metal soaps derived from organic carboxylic acids having 8 to 22 carbon atoms, preferably 12 to 18 carbon atoms, such as zinc stearate, magnesium stearate or lithium stearate, zinc
- 10 laurate and magnesium myristate, the compounds  $\text{SiO}_2/\text{TiO}_2/\text{SiO}_2$ ,  $\text{TiO}_2/\text{CeO}_2/\text{SiO}_2$ , or else  $\text{TiO}_2/\text{ZnO}/\text{talc}$ , and polyethylene terephthalate/polymethacrylate polymers in the form of flakes.

14. The gel as claimed in any of claims 8 to
- 15 13, characterized in that the fillers are present in an amount ranging up to 60% by weight, preferably from 0.1 to 40% by weight, relative to the total weight of the gel.

15. The gel as claimed in any of the
- 20 preceding claims, characterized in that it further comprises a salt.

16. The gel as claimed in the preceding claim, characterized in that the salt is selected from calcium, magnesium or strontium nitrate, calcium or
- 25 magnesium borate, calcium, sodium, magnesium, strontium, neodymium or manganese chloride, magnesium

or calcium sulfate, calcium or magnesium acetate, and mixtures thereof.

17. The gel as claimed in the preceding claim, characterized in that the salt is magnesium  
5 chloride.

18. The gel as claimed in any of the preceding claims, characterized in that it further comprises a cosmetically or physiologically acceptable medium.

10 19. The gel as claimed in any of the preceding claims, characterized in that it further comprises a water-soluble dye.

20. The gel as claimed in any of the preceding claims, characterized in that it further  
15 comprises a solvent selected from ethanol, isopropanol, propylene glycol, butylene glycol, dipropylene glycol, diethylene glycol, glycol ethers, and mixtures thereof.

21. The gel as claimed in any of the preceding claims, characterized in that it further  
20 comprises an additional compound selected from antioxidants, essential oils, preservatives, active lipophilic or hydrophilic pharmaceutical or cosmetic substances, moisturizers, vitamins, essential fatty acids, sphingolipids, self-tanning compounds,  
25 sunscreens, fragrances, and mixtures thereof.



22. A solid composition with a continuous aqueous phase, characterized in that it comprises a gel as defined in any of claims 1 to 21.

23. A makeup product for the skin or  
5 keratinous fibers, characterized in that it comprises a gel as defined in any of claims 1 to 21 and/or a composition as defined in claim 22.

24. The product as claimed in claim 23,  
characterized in that it constitutes a body makeup  
10 product, a foundation, an eyeshadow, a blusher, a concealer, a lipstick, a lipliner pencil, a mascara, an eyeliner pencil, or a stick for coloring or making up locks of hair.

25. A method of making up the skin and/or  
15 keratinous fibers, which consists in applying to the skin and/or keratinous fibers a gel as defined in any of claims 1 to 21 and/or a composition as defined in claim 22 and/or a product as defined in either of claims 23 and 24.

## ABSTRACT

### SOLID AQUEOUS GEL COMPRISING A HYDROPHILIC GELLING AGENT AND A SPECIFIC POLYETHYLENE GLYCOL, COMPOSITION COMPRISING THIS GEL AND USES

The present invention relates to a solid aqueous gel comprising i) at least one hydrophilic gelling agent and ii) at least one polyethylene glycol in which the number of moles of oxyethylene ranges from 12 to 180. It likewise relates to a solid composition, with a continuous aqueous phase, comprising this gel.

This composition may be used in stick or compact (waterpact) form and may constitute products for making up the skin and/or mucosae and/or keratinous fibers. It has a hardness which permits both effective cleaving of the product and effective cohesion of the stick. This composition may be applied directly to the skin or with the aid of a sponge and provides a high degree of freshness on application.

**Declaration and Power of Attorney for Patent Application****Déclaration et Pouvoir pour Demand de Brevet****French Language Declaration**

En tant que l'inventeur nommé ci-après, je déclare par le présent acte que:

As a below named inventor, I hereby declare that:

Mon domicile, mon adresse postale et ma nationalité sont ceux figurant ci-dessous à côté de mon nom.

My residence, post office address and citizenship are as stated next to my name.

Je crois être le premier inventeur original et unique (si un seul nom est mentionné ci-dessous), ou l'un des premiers co-inventeurs originaux (si plusieurs noms sont mentionnés ci-dessous) de l'objet revendiqué, pour lequel une demande de brevet a été déposée concernant l'invention intitulée

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

AQUEOUS SOLID GEL COMPRISING A HYDROPHILIC GELLING AGENT AND A PARTICULAR POLYETHYLENE GLYCOL, COMPOSITION COMPRISING SAME AND USES

et dont la description est fournie ci-joint à moins que la case suivante n'ait été cochée:

the specification of which is attached hereto unless the following box is checked:

☒ a été déposée le \_\_\_\_\_  
sous le numéro de demande des Etats-Unis ou le  
numéro de demande international PCT  
\_\_\_\_\_ et modifiée  
\_\_\_\_\_ (les cas échéant).

☒ was filed on June 8, 2000 as United States  
Application Number or PCT International  
Application Number PCT/FR00/01577 and was  
amended on \_\_\_\_\_ (if applicable).

Je déclare par le présent acte avoir passé en revue et compris le contenu de la description ci-dessus, revendications comprises, telles que modifiées par toute modification dont il aura été fait référence ci-dessus.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above

Je reconnais devoir divulguer toute information pertinente à la brevetabilité, comme défini dans le Titre 37, § 1.56 du Code fédéral des réglementations.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

## French Language Declaration

Je revendique par le présent acte avoir la priorité étrangère, en vertu du Titre 35, § 119(a)-(d) ou § 365(b) du Code des Etats-Unis, sur toute demande étrangère de brevet ou certificat d'inventeur ou, en vertu du Titre 35, § 365(a) du même Code, sur toute demande internationale PCT désignant au moins un pays autre que les Etats-Unis et figurant ci-dessous et, en cochant la case, j'ai aussi indiqué ci-dessous toute demande étrangère de brevet, tout certificat d'inventeur ou toute demande internationale PCT ayant une date de dépôt précédant celle de la demande à propos de laquelle une priorité est revendiquée.

Prior foreign application(s)  
Demande(s) de brevet antérieure(s)

99/07766                      France  
(Number)                      (Country)  
(Numéro)                      (Pays)

(Number)                      (Country)  
(Numéro)                      (Pays)

Je revendique par le présent acte tout bénéfice, en vertu du Titre 35, § 119(e) du Code des Etats-Unis, de toute demande de brevet provisoire effectuée aux Etats-Unis et figurant ci-dessous.

(Application No.)                      (Filing Date)  
(N° de demande)                      (Date de dépôt)

(Application No.)                      (Filing Date)  
(N° de demande)                      (Date de dépôt)

Je revendique par le présent acte tout bénéfice, en vertu du Titre 35, § 120 du Code des Etats-Unis, de toute demande de brevet effectuée aux Etats-Unis, ou en vertu du Titre 35, § 365(c) du même Code, de toute demande internationale PCT désignant les Etats-Unis et figurant ci-dessous et, dans la mesure où l'objet de chacune des revendications de cette demande de brevet n'est pas divulgué dans la demande antérieure américaine ou internationale PCT, en vertu des dispositions du premier paragraphe du Titre 35, § 112 du Code des Etats-Unis, je reconnais devoir divulguer toute information pertinente à la brevetabilité, comme défini dans le Titre 37, § 1.56 du Code fédéral des réglementations, dont laquelle est devenue disponible entre la date de dépôt de la demande antérieure, et la date de dépôt de la demande nationale ou internationale PCT de la présente demande:

(Application No.)                      (Filing Date)  
(N° de demande)                      (Date de dépôt)

(Application No.)                      (Filing Date)  
(N° de demande)                      (Date de dépôt)

Je déclare par le présent acte que toute déclaration ci-incluse est, à ma connaissance, véridique et que toute déclaration formulée à partir de renseignements ou de suppositions est tenue pour véridique; et de plus, que toutes ces déclarations ont été formulées en sachant que toute fausse déclaration volontaire ou son équivalent est passible d'une amende ou d'une incarcération, ou des deux, en vertu de la Section 1001 du Titre 18 du Code des Etats-Unis, et que de telles déclarations volontairement fausses risquent de compromettre la validité de la demande de brevet ou du brevet délivré à partir de celle-ci.

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International Application which designated at least one country other than the United States, listed below, and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed  
Droit de priorité non revendiqué

June 18, 1999                      ☐  
(Day/Month/Year Filed)  
(Jour/Mois/Année de dépôt)

(Day/Month/Year Filed)                      ☐  
(Jour/Mois/Année de dépôt)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International Application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International Application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose any or all information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Status) (patented, pending, abandoned)  
(Status) (breveté, en cours d'examen, abandonné)

(Status) (patented, pending, abandoned)  
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I hereby declare that all statements made herein of my own knowledge and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## French Language Declaration

POUVOIRS: En tant que l'inventeur cité, je désigne par la présente l'(les) avocat(s) et/ou agent(s) suivant(s) pour qu'ils poursuive(nt) la procédure de cette demande de brevet et traite(nt) toute affaire s'y rapportant avec L'Office des brevets et des marques: (*mentionner le nom et le numéro d'enregistrement*).

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this patent application and transact all business in the Patent and Trademark Office connected therewith: (*list name and registration number*):

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